

Epidemiology and Prevention of Vaccine-Preventable Diseases

Course Number VC0029

Evaluation Questionnaire and Exam

Course Goal:

To improve immunization practices in the United States.

Course Objectives:

After participating in this self study activity, participants will be able to:

- Describe the difference between active and passive immunity.
- List two characteristics of live vaccines and inactivated vaccines.
- List the four components of the recommended strategy to increase immunization levels.

For each vaccine-preventable disease*:

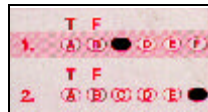
- Describe the disease and the causative agent.
- List the groups at highest risk.
- Identify those for whom routine immunization is recommended.
- State the characteristics, schedule, contraindications, and adverse reactions for the vaccine used to prevent the disease.

Tell us about yourself...

Please note: Question 2 is a continuation of question 1. Please carefully read the questions. Your credit will be awarded based on the type of credit you select. Please answer each question but choose only **ONE** type of credit. Your answer to one of the questions will be

F. None of the above.

Example: If you wish to receive **CNE**, your answer sheet will look like this **L**



1. What type of continuing education credit do you wish to receive?

****Nurses should request CNE not CEU.**

Please see note at end of document.

- A. CME for physicians
- B. CME for non-physicians
- C. CNE (Continuing Nursing Education)
- D. CEU (Continuing Education Units)
- E. ACPE (Continuing Pharmacy Education)
- (Do not select E; not available for this course)**
- F. None of the above

2. What type of continuing education credit do you wish to receive?

- A. CHES *(Do not select A: not available for this course)*
- B. *(Do not select B; not a valid selection)*
- C. *(Do not select C; not a valid selection)*
- D. *(Do not select D; not a valid selection)*
- E. Not participating in this course for credit
- F. None of the above

3. Are you a...

- A. Nurse
- B. Pharmacist
- C. Physician
- D. Veterinarian
- E. None of the above

4. What is your highest level of education?

- A. High School
- B. Associate
- C. Bachelors
- D. Masters
- E. Doctorate
- F. Other

5. Do you administer vaccines to children and/or adults?

- A. Yes, children only
- B. Yes, adults only
- C. Yes, both children and adults
- D. No, I don't administer vaccines



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Continued on next page...



Please note: Question 7 is a continuation of question 6. Please answer each question, but choose only ONE occupation. Your answer to one of these questions will be

F. None of the above

Example: If you are an Epidemiologist, your answer sheet will look like this **L**

The image shows a sample answer sheet for two questions. For question 6, the options are A, B, C, D, E, F. Option B is marked with a black circle. For question 7, the options are T, F, A, B, C, D, E, F. Option B is marked with a black circle.

6. Which of the following best describes your current occupation?

- A. Environmental Health Professional
- B. Epidemiologist
- C. Health Educator
- D. Laboratorian
- E. Physician Assistant
- F. None of the above

7. Which of the following best describes your current occupation?

- A. Administrator
- B. Nurse Practitioner
- C. Infection control practitioner
- D. Other office or clinic patient care provider
- E. Student
- F. None of the above

8. Which of the following best describes your current work setting?

- A. Academic (public and private)
- B. Private health care organization
- C. Public health organization
- D. Environmental health organization
- E. Non-profit organization
- F. Other work setting

9. Which of the following best describes the organization in which you work?

- A. Federal government
- B. State government
- C. County government
- D. Local government
- E. Non-governmental agency
- F. Other type of organization

Tell us about the course...

10. How did you obtain this course?

- A. Purchased
- B. Downloaded or printed from website
- C. Shared materials with colleague(s)
- D. Obtained by mail from PHTN
- E. Not applicable

11. How did you first learn about this course

- A. State publication (or other state-sponsored communication)
- B. MMWR
- C. CDC Internet site or homepage
- D. PHTN source (PHTN website, email announcement)
- E. Colleague
- F. Other

12. What was the most important factor in your decision to obtain this course?

- A. Content
- B. Continuing education credit
- C. Supervisor recommended
- D. Previous participation in CDC/PHTN training(s)
- E. Ability to take the course at my convenience
- F. Other

13. How much time did you spend viewing the videotapes, and completing the evaluation and exam?

- A. Less than 9 hours
- B. 9 to 10 hours
- C. More than 10 hours but less than 11 hours
- D. 11 to 12 hours
- E. More than 12 hours

14. How did you view this course?

- A. Videotape
- B. Video streamed through the Internet

15. Please rate your level of knowledge prior to completing this course.

- A. Great deal of knowledge about the content
- B. Fair amount of knowledge about the content
- C. Limited knowledge about the content
- D. No prior knowledge about the content
- E. No opinion

Continued on next page...

16. Please estimate your knowledge gain due to completing this course.

- A. Gained a great deal of knowledge about the content
- B. Gained a fair amount of knowledge about the content
- C. Gained a limited amount of knowledge about the content
- D. Did not gain any knowledge about the content
- E. No opinion

Please use the scale below to rate your level of agreement with the following statements about this course.

- A. Agree
- B. No opinion
- C. Disagree
- D. Not applicable

17. The PHTN promotional material for the course adequately described the course and its content.

18. The objectives are relevant to the goal.

19. The content in this course was appropriate for my training needs.

20. Participation in this course enhanced my professional effectiveness

21. I will recommend this course to my colleagues.

22. Overall, this course enhanced my ability to understand the content.

23. The graphics, illustrations, and animations are effective learning resources.

24. Ordering course materials through the Public Health Foundation was user-friendly.

25. Ordering registration materials through the 1-800-41-TRAIN phone number was user-friendly.

26. Ordering registration materials through the PHTN website was user-friendly.

27. I am confident I can describe the difference between active and passive immunity.

28. I am confident I can list two characteristics of live vaccines and inactivated vaccines.

29. I am confident I can list the four components of the recommended strategy to increase immunization levels.

30. I am confident that for each vaccine-preventable disease* I can describe the disease and the causative agent.

31. I feel confident that for each vaccine-preventable disease* I can list the groups at highest risk.

32. I am confident that for each vaccine-preventable disease* I can identify those for whom routine immunization is recommended.

33. I am confident that for each vaccine-preventable disease* I can state the characteristics, schedule, contraindications, and adverse reactions for the vaccine used to prevent the disease.

34. Dr. Atkinson demonstrated expertise in the subject matter.

35. Dr. Humiston demonstrated expertise in the subject matter.

Exam Questions

Questions 36 -55 are the exam questions. If you wish to receive continuing education credit for this program you **MUST** complete this exam. There is only one correct answer for each question.

36. What is the most frequent adverse reaction following MMR vaccine?

- A. Fever
- B. Pain, redness, or swelling at the injection site
- C. A generalized macular rash
- D. An illness identical to measles disease
- E. Headache

37. Which of the following best describes rubella vaccine?

- A. Live attenuated bacterial vaccine
- B. Inactivated whole virus vaccine
- C. Subunit vaccine
- D. Live attenuated virus vaccine
- E. Toxoid vaccine

38. Which of the following is an example of passive immunity?

- A. Maternal antibody acquired by a fetus across the placenta
- B. Immune globulin
- C. Disease-specific hyperimmune globulin
- D. Transfusion of whole blood
- E. All the above are examples of passive immunity

39. What is the *Haemophilus influenzae* type b (Hib) schedule for a healthy 4 year-old child who has received no prior doses of Hib conjugate vaccine?

- A. Three doses of Hib vaccine separated by 1 month, and a booster dose 2 months after the third dose.
- B. Three doses of Hib vaccine separated by 1 month, and no booster dose.
- C. 2 doses of Hib vaccine separated by 1 month
- D. A single dose of Hib vaccine
- E. Hib vaccine is not routinely recommended for this child

40. Which of the following statements is not true regarding acellular pertussis vaccine (DTaP)?

- A. DTaP may be substituted at any time in a child's pertussis vaccination schedule.
- B. Different brands of DTaP are interchangeable in a child's pertussis vaccination schedule, if necessary.
- C. All licensed brands of DTaP contain a different number and concentration of pertussis antigens.
- D. DTaP is not recommended for children 5 years of age or older.
- E. Adverse reactions occur less commonly following DTaP than following whole cell DTP.

41. Varicella is recommended for all susceptible persons with human immunodeficiency virus (HIV) infection.

- A. True
- B. False

42. Which of the following vaccines may be given simultaneously with inactivated polio vaccine (IPV)?

- A. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP)
- B. *Haemophilus influenzae* type b (Hib) vaccine
- C. Hepatitis B vaccine
- D. Measles-mumps-rubella vaccine
- E. All of the above vaccines may be given simultaneously with IPV.

43. If the interval between doses of hepatitis B vaccine is longer than the recommended interval, you should:

- A. Restart the series from the beginning.
- B. Add one additional dose.
- C. Add two additional doses.
- D. Perform a serologic test to determine if a response to the vaccine has been obtained.
- E. Continue the series, ignoring the prolonged interval.

44. All adults who have received a dose of pneumococcal polysaccharide vaccine should be given a booster dose of pneumococcal conjugate vaccine.

- A. True
- B. False

45. What is the earliest age recommended for the first dose of *Haemophilus influenzae* type b vaccine?

- A. Birth
- B. 4 weeks
- C. 6 weeks
- D. 6 months
- E. 12 months

46. What is the most important reason inactivated polio vaccine is now preferred over oral polio vaccine?

- A. To reduce the cost of the polio vaccination series.
- B. To eliminate the risk of vaccine-associated paralytic polio.
- C. To assure that immunity to polio virus infection will persist for at least 20 years.
- D. To simplify storage and handling of polio vaccine supplies.
- E. To be consistent with polio vaccination recommendations of the World Health Organization.

47. Most reported cases of congenital rubella syndrome in the last 3 years have been in infants whose mothers were born outside the United States.

- A. True
- B. False

48. What is the routine schedule for pneumococcal conjugate vaccine?

- A. 4 doses at 2, 4, 6, and 12-15 months of age
- B. 3 doses at birth, 2 months and 6 months of age
- C. 2 doses at 12 and 24 months of age
- D. 2 doses at 2 years and 5 years of age
- E. 1 dose at 5 years of age

49. Which of the following is a valid contraindication to vaccination with an inactivated vaccine?

- A. Pregnant woman in the household
- B. Viral upper respiratory infection without fever
- C. Recent completion of a 5-day course of oral steroids
- D. Severe allergic reaction to a prior dose
- E. All the above are valid contraindications to an inactivated vaccine.

50. How many doses of inactivated polio vaccine (IPV) are recommended for routine vaccination of children in the United States?

- A. 1 dose
- B. 2 doses
- C. 3 doses
- D. 4 doses
- E. 5 doses

51. What age group has the highest incidence of invasive pneumococcal disease in the United States.

- A. Children two year of age and younger
- B. Children 5 to 14 years of age
- C. Adolescents and young adults
- D. Adults 30 to 55 years of age
- E. Adults 65 years of age or older

52. Influenza vaccine should be administered annually to all healthy adults 50 years of age and older.

- A. True
- B. False

53. Which of the following components of the recommended strategy to increase immunization levels?

- A. Assessment of current immunization levels
- B. Feedback of coverage information to the provider
- C. Incentives to improve immunization levels
- D. Exchange of information regarding successful strategies to improve immunization levels
- E. All the above are components of the recommended strategy to increase immunization levels

54. What is the ACIP recommendation for routine booster doses of hepatitis B vaccine?

- A. A booster dose every 10 years for life.
- B. A single booster dose 10 years after completion of the 3-dose series.
- C. A single booster dose at age 20 years.
- D. A single booster dose at age 50.
- E. Booster doses of hepatitis B vaccine are not routinely recommended.

55. At what age does ACIP recommend the first routine booster dose of adult tetanus and diphtheria toxoids (Td)?

- A. 4-5 years
- B. 11-12 years
- C. 14-16 years
- D. 50-55 years
- E. 65-70 years

Thank you for participating in this course.

We welcome your questions and comments. Contact the National Immunization Program by Email at nipinfo@cdc.gov. Be sure to check for updates of this self study on our website at <http://www.cdc.gov/nip/ed/latebreak.htm>

Visit the Public Health Training Network at <http://www.cdc.gov/phtn> for other resources

Note to nurses:

CDC is accredited by the American Nurses Credentialing Center's Commission (ANCC) on Accreditation. ANCC credit is accepted by most State Boards of Nursing

***Vaccine-preventable diseases discussed in this program are pertussis, poliomyelitis, *Haemophilus influenzae* type b, measles, rubella, varicella, hepatitis B, hepatitis A, influenza, and pneumococcal disease of children and adults.**

Answers to exam questions: 36. A; 37. D; 38. E; 39. D; 40. D; 41. B; 42. E; 43. E; 44. B; 45. C; 46. B; 47. A; 48. A; 49. D; 50. D; 51. A; 52. A; 53. E; 54. E; 55. B.